## **AUGUST 1, 2007**

# CONSUMERS' DIRECTORY OF CERTIFIED EFFICIENCY RATINGS

for

### Heating and Water Heating Equipment

#### **INCLUDES:**

#### RESIDENTIAL HEATING EQUIPMENT

- Gas Central Furnaces
- Oil Central Furnaces
- Gas Boilers
- Oil Boilers
- Gas Room Heaters
- Gas Floor Furnaces
- Gas Wall Furnaces

#### **COMMERCIAL HEATING EQUIPMENT**

- Gas Central Furnaces
- Oil Central Furnaces

#### RESIDENTIAL WATER HEATING EQUIPMENT

- Gas Water Heaters
- Oil Water Heaters
- Electric Water Heaters including Heat Pump Type

#### **COMMERCIAL WATER HEATING EQUIPMENT**

- Gas Water Heaters
- Oil Water Heaters
- Electric Water Heaters



An Association of Appliance and Equipment Manufacturers

"Chapter I and Chapter III (Sections 1 - 3) of this directory have been approved by the California Energy Commission (CEC) for determining compliance with its energy efficiency standards for buildings. (See Section 100 (g), title 24, California Code of Regulations). For information about models for sale in California that are beyond the scope of the GAMA program or are produced by manufacturers that have chosen not to participate in the GAMA program, please call the CEC Hotline at (916) 654-5106 or (toll free in California) at (800) 772-3300."



AUGUST 1, 2007
CONSUMERS DIRECTORY OF
CERTIFIED EFFICIENCY RATINGS
FOR RESIDENTIAL HEATING
AND WATER HEATING
EQUIPMENT AND COMMERCIAL
WATER HEATING EQUIPMENT

PROGRAM SPONSOR AND ADMINISTRATOR:

GAMA 2107 WILSON BLVD., SUITE 600 ARLINGTON, VIRGINIA 22201

PROGRAM'S INDEPENDENT TESTING LABORATORY:

INTERTEK TESTING SERVICES 3933 U.S. ROUTE 11 P.O. BOX 2040 CORTLAND, NEW YORK 13045

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#### **FOREWORD**

The Gas Appliance Manufacturers Association (GAMA) is a national trade association whose members manufacture over 90 percent of all the residential, commercial and industrial gas appliances made in the United States. GAMA also represents manufacturers of certain products that use oil or electricity as their energy source. There are a number of product divisions within GAMA. Four of those, the Furnace Division, Hydronics Institute Division, Direct Heating Division and Water Heater Division, have developed separate efficiency certification programs which verify manufacturers' equipment efficiency ratings in accordance with federally mandated test procedures.

The GAMA Furnace and Hydronics Institute Divisions sponsor the certification program for residential gas and oil central furnaces and boilers. The GAMA Direct Heating Division sponsors the efficiency certification program for vented gas room heaters, floor furnaces and wall furnaces. The GAMA Water Heater Division sponsors the efficiency certification program for residential gas, oil, electric (including heat pump type) water heaters, and commercial water heaters. Each of these programs operates independently of each other. This Directory lists the models for all participating manufacturers in each of the programs. The following is the format for those listings:

CHAPTER I Gas and Oil Central Heating Equipment

CHAPTER II Gas Vented Direct Heating Equipment

CHAPTER III Gas, Oil, Electric, Combination, & Instantaneous Water Heaters

CHAPTER IV Commercial Gas, Oil, Electric, & Instantaneous Water Heaters

CHAPTER V Commercial Gas and Oil Central Heating Equipment

Each participant in the GAMA Efficiency Certification Program is entitled to display the GAMA Certification Symbol (Seal), Figure 1, on units of models covered by the program. The seal may be affixed to the unit only at the time and place of manufacture. The seal may also be displayed on specification sheets, advertising and on other literature that either specifies ratings or claims participation in the program. The seal and listing in this Directory are an indication that the equipment's efficiency rating as well as output heating capacity for heating equipment and first hour rating for water heating equipment have been determined and are accurately stated in accordance with the applicable efficiency test method; no other warranty, representation, endorsement or other statement, expressed or implied, is made.

Figure 1. GAMA Certification Seal



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# CHAPTER IV COMMERCIAL GAS, OIL AND ELECTRIC WATER HEATERS CONTENTS

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#### USE OF CHAPTER IV AND DESCRIPTION OF GAMA COMMERCIAL WATER HEATER EFFICIENCY CERTIFICATION PROGRAM

#### How the Chapter is Set up

This Chapter is divided into sections based on the type of commercial water heater: gas, oil, and electric. The columns of each listing (shown below) provide the essential information needed to select an efficient and properly sized water heater.

Storage

Model N			Input	Efficiency	Loss	
(1)	(2)	(3)	(4)	(5)	(6)	
Column 1	Model Number the manufacture	dentifies each model. r's nameplate.)	(The model ı	number on a wat	er heater can	be found on
Column 2	Footnotes furthe	r identify the model or	its intended	use.		
Column 3	Storage Volume	is the rated volume for	r tank type w	ater heaters.		
Column 4	value will be sho	hourly energy consur wn if the model is avail nput selected from a r	able with sev	eral inputs. Indiv	idual units of th	e model will
Column 5		cy is a measure of how the thermal efficiency is	,	0,		
Column 6	standby periods.	a measure of how r Heaters using gas or entage of the energy in	oil as their e	nergy source re	oort in Btuh. E	lectric units

Standby

Thermal

#### Information About the GAMA Water Heater Efficiency Certification Program

Chapter IV is a product of the Water Heater Efficiency Certification Program sponsored by the Gas Appliance Manufacturers Association, Inc. (GAMA) in cooperation with its industry members. The Program provides for independent verification of the water heater manufacturer's thermal efficiency and standby loss. The complete details of the GAMA Water Heater Efficiency Certification Program are contained in the Program Procedural Guide which is available from GAMA.

#### **Testing Laboratories and Test Procedures**

Intertek Testing Services of Cortland, New York, has been retained as the program administrator and independent testing laboratory responsible for conducting efficiency verification tests on water heaters. Randomly selected units of commercial gas, electric and oil water heaters are tested in accordance with the test procedures specified by federal law.

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#### Scope of the Program

The Program is open to all manufacturers of water heaters and to all firms that market private brand models. Participation in the Program is voluntary, but all models of commercial water heaters marketed by a participant in the United States and within the scope of the program must be included in the Efficiency Certification Program. The Program presently covers commercial water heaters with input ratings up to 500,000 Btuh and are defined by the following parameters:

Electric storage water heaters with energy input ratings greater than 12 kilowatts or with a storage capacity of more than 120 gallons.

Gas storage water heaters with energy input ratings greater than 75,000 Btu's per hour or with a storage capacity of more than 100 gallons.

Oil storage water heaters with energy input ratings greater than 105,000 Btu's per hour or with a storage capacity of 50 gallons or more.

Gas instantaneous water heaters with input ratings greater than 200,000 Btu's per hour or designed to deliver water at a controlled temperature greater than 180°F.

#### **Model Number**

The model number listed in the Directory identifies the essential model number designation of the water heater. All the numbers and letters of the listed model number will appear on the rating plate of units of that model, otherwise the units are not that model. As noted, other letters and numbers may also be on the rating plate, but they are not required to identify the basic model.

Page 220	S	ECTION 3 -	COMM	IERCIAL I	ELECTRIC WAT	ER HEATERS			August 2007
		Rated Storage		Standby		Rated Storage		Standby	
Model	_	Vol.	Input	Loss	Model		Vol.	Input	Loss
Number	Footnotes	Gals.	kWh	%/hr	Number	Footnotes	Gals.	kWh	%/hr
AMERICAN WATE	R HEATER COM	IPANY			<ol> <li>The following prefixe names: BS, C, IN, MN, I</li> </ol>	s may be added to the Relian N, RE, SW and UP	nce water heater line	e to reflect p	rivate brand
Trade Name(s): America						one or more of the following	g suffixes: ASME, A	A, D, HW, N	S, NSK, or RS
*ITCE*-050	5,6	50	12.0	0.89	RHEEM MFG. C	O., WATER HEATE	R DIVISION		
*STCE*-050	5,6	50 80	12.0 12.0	0.89	Trade Name(s): Rhe				
*ITCE*-080 *STCE*-080	5,6 5,6	80 80	12.0	0.68 0.68	E30A-*-G		30		1.16
Trade Name(s): America	<i>'</i>	80	12.0	0.08	E40A-*-G		40		0.96
ITCE33-50	an, Champion	50		0.89	E50-*-G-1		50		0.84
STCE33-50		50		0.89	ES50-*-G-1		50		0.91
ITCE33-80		80		0.67	E85-*-G ES85-*-G		85 85		0.61 0.61
STCE33-80		80		0.67	ME85		85 85	12.4	0.54
ITCE33-119		119		0.53	ME85		85	18.0	0.54
STCE33-119	F 2	119	15.0	0.53	ME85		85	24.0	0.54
*ITCE*-119 *STCE*-119	5,6 5,6	119	15.0 15.0	0.53 0.53	ME105		105	12.4	0.50
	3,0	119	13.0	0.55	ME105		105	18.0	0.50
Additional Footnotes	.1 A				ME105		105	24.0	0.50
5. First * may be replaced wi 6. Second * can be replaced v					ES120-*-G		119		0.52
BRADFORD WHITE		N			E120-*-G		119		0.57
		11			RICHMOND WA	TER HEATERS			
Trade Name(s): Bradfor 30A-**-*-***	1,3,5	30		1.66	Trade Name(s): Rich	nmond			
40A-**-*-***	1,3,5	40		1.05	TE50-*-G-1		50		0.84
E32-50S*	1,3,3	50		1.00	TES50-*-G-1		50		0.84
M-II-80-**-**	1,3,5	80		0.67	TE85-*-G TES85-*-G		85 85		0.61 0.61
E32-80R*	1	80		0.74	TE120-*-G		83 119		0.51
E32-120R*	1	119		0.56	TES120-*-G		119		0.52
M-II-120*-**-**	1,3,5	119		0.65		TER PRODUCTS C			
Trade Name(s): Bradfor	, ,						0.		
50A	1,3,5	50	12.0	1.00	Trade Name(s): A.O # DRE 52	. Smith	50	27.0	0.85
80A	1,3,5	80	12.0	0.79	# DKE 32 # DVE 52		50	27.0	0.85
120A	1,3,5	119	12.0	0.65	# DRE 80		80	27.0	0.66
Additional Footnotes					# DVE 80		80	27.0	0.66
<ol> <li>* Indicates a letter A-Z or</li> <li>An additional "S" may be</li> </ol>		cate screw in elem	ente		# DRE 120		119	27.0	0.53
5. An additional suffix no. m				" may be	# DVE 120		119	27.0	0.53
replaced by a "D".					Trade Name(s): Dur	a-Power			
<b>GSW WATER HEAT</b>	TING COMPANY	7			CMC-*		5		6.30
Trade Name(s): John W	ood				DSE5-*		5		6.30
JWITCE-050-***	3	50	12.0	0.89	DSE10-* DSE20-*		10 20		3.31 1.80
JWSTCE-050-***	3	50	12.0	0.89	SU-*		20		1.80
JWITCE-080-***	3	80	12.0	0.68	DSE30-*		30		1.30
JWSTCE-080-*** JWITCE-119-***	3	80	12.0 15.0	0.68 0.53	DSE40-*		40		1.05
JWSTCE-119-***		119 119	15.0	0.53	DSE50-*		50		0.90
		119	13.0	0.55	DSE65-*		65		0.76
Additional Footnotes					DSE80-*		80		0.68
3. Includes Pipe Insulation					DSE100-*		100		0.60
RECO INDUSTRIES	}				DSE120-*		120		0.55
Trade Name(s): Reco						Discontinued	l Models		
**3-**-*-50-II-M-**		50		0.89	DVE-125		125		0.54
**3-**-*-80-II-M-**		80		0.67	Trade Name(s): Stat	e			
**3-**-*-120-II-M-**		119		0.53	DEN 30		30	4.5	0.93
RELIANCE WATER	HEATER COM	PANY			DEL 30		30	4.5	1.19
Trade Name(s): Ambass		ion, Nationaline	, Penfield,		DEN 40		40	4.5	0.97
Penfield/State, President	t, Sentry				DEL 40 DEN 52		40 50	4.5 4.5	1.00 0.70
	Discontinued	l Models			DEL 50		50	4.5	0.75
620*	1,2	20		2.00	DEN 66		66	4.5	0.75
630*	1,2	30		1.00	DEN 80		80	4.5	0.63
640*	1,2	40		1.00	DEN 120		120	4.5	0.41
652*	1,2	52		1.00	STATE INDUSTR	RIES, INC.			
682*	1,2	82		1.00	Trade Name(s): San				
6120*	1,2	120		1.00					
Additional Footnotes					CD 620*	Discontinued			1.00
					SB630* SB640*	7 7	30 40		1.20 0.98
					3D040**	1	40		0.98

STANDARD FOOTNOTES:
# Rating Voluntarily Revised Since Last Directory

★ Rating Revised By Program Since Last Directory

Model Number  STATE INDUSTRIES, IN Trade Name(s): Sandblaster  SB652*	C.	Rated Storage Vol. Gals.	Input kWh	Standby Loss %/hr	Model Number	Footnotes	Rated Storage Vol.	Input	Standby Loss
Trade Name(s): Sandblaster	C.				rumber	1 Oomotes	Gals.	kWh	%/hr
,									
CD 450*									
CD 650*	Discontinued	Models							
3D032**	7	52		1.25					
SB682*	7	82		0.63					
SB6120*	7	120		0.53					
Trade Name(s): State									
PCE 30 2ORTA		30	4.5	0.93					
PCE 30 2OLSA		30	4.5	1.19					
PCE 40 2ORTA		40	4.5	0.97					
PCE 40 2OLSA		40	4.5	1.00					
PCE 52 2ORTA		50	4.5	0.70					
PCE 50 2OLSA		50	4.5	0.75					
# CSB 52 *** IFE*		50	27.0	0.85					
# CSB 52 *** SFE*		50	27.0	0.85					
PCE 66 2ORTA		66	4.5	0.75					
PCE 80 2ORTA		80	4.5	0.63					
# CSB 82 *** IFE*		80	27.0	0.66					
# CSB 82 *** SFE*		80	27.0	0.66					
PCE 120 2ORTA		119	4.5	0.42					
# CSB 120 *** IFE*		119	27.0	0.53					
#CSB 120 *** SFE*		119	27.0	0.53					
Additional Footnotes									
7. * All models may have one or mo X or Y	ore of the following	g suffixes: ASME	, A, B, E, IFI	E, K, Q, SFE,					

STANDARD FOOTNOTES:
# Rating Voluntarily Revised Since Last Directory

★ Rating Revised By Program Since Last Directory